Statement of Basis

for the DRAFT CAAPP Permit for:

Source Name:

Color Communications, Inc.

Statement of Basis No.: 95090040-1410

I.D. No.: 031600BGU

Permit No.: 95090040

Date Prepared: October 31, 2014

Permitting Authority:

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
217/785-1705

This Statement of Basis is being provided to USEPA and any interested parties as required by Section 39.5(8)(b) of the Illinois Environmental Protection Act.

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PREFACE

Reason For This Document

This document is a requirement of the permitting authority in accordance with 502(a) of the Clean Air Act, 40 CFR 70.7(a)(5), and Section 39.5(8)(b) of the Illinois Environmental Protection Act. Section 39.5(8)(b) of the Illinois Environmental Protection Act states the following:

> "The Agency shall prepare a …… statement that sets forth the legal and factual basis for the Draft CAAPP permit conditions, including references to the applicable statutory or regulatory provisions."

Purpose Of This Document

The purpose of this Statement of Basis is to provide discussion regarding the development of this Draft CAAPP Permit. This document would also provide the permitting authority, the public, the source, and the USEPA with the applicability and technical matters that form the basis of the Draft CAAPP Permit.

Summary Of Historical Actions Leading Up To Today's Permitting Action

Since the last Renewal CAAPP Permit issued on October 2, 2007, the source has also been issued the following: Administrative Amendment (issued October 21, 2010); Administrative Amendment (issued February 19, 2010); Administrative Amendment (issued December 31, 2008).

Limitations

This Statement of Basis is not enforceable and only sets forth the legal and factual basis for the Draft CAAPP Permit Conditions (Chapters I and II). Chapter III contains supplemental material that would assist in educating interested parties about this source and the Draft CAAPP Permit. The Statement of Basis does not shield the source from enforcement actions or its responsibility to comply with existing or future applicable regulations. Nor does the Statement of Basis constitute a defense to a violation of the Federal Clean Air Act or the Illinois Environmental Protection Act including implementing regulations.

This document does not purport to establish policy or guidance.

INTRODUCTION

The Clean Air Act Permit Program (CAAPP) is the operating permit program established in Illinois for major stationary sources as required by Title V of the federal Clean Air Act and Section 39.5 of the Illinois Environmental Protection Act. The Title V Permit Program (CAAPP) is the primary mechanism to apply the various air pollution control requirements established by the Clean Air Act to major sources, defined in accordance with Title V of the Clean Air Act. The Draft CAAPP Permit contains conditions identifying the state and federal applicable requirements that apply to the source. The Draft CAAPP Permit also establishes the necessary monitoring and compliance demonstrations. The source must implement this monitoring to demonstrate that the source is operating in accordance with the applicable requirements of the permit. The Draft CAAPP Permit identifies all applicable requirements for the various emission units as well as establishes detailed provisions for testing, monitoring, recordkeeping, and reporting to demonstrate compliance with the Clean Air Act. Further explanations of the specific provisions of the Draft CAAPP Permit are contained in the following Chapters of this Statement of Basis.

In addition, the Illinois EPA has committed substantial resources and effort in the development of an acceptable Statement of Basis (this document) that would meet the expectations of USEPA, Region 5. As a result, this document contains discussions that address applicability determinations, periodic monitoring, streamlining, prompt reporting, and SSM authorizations (as necessary). These discussions involve, where necessary, a brief description and justification for the resulting conditions and terms in this Draft CAAPP Permit. This document begins by discussing the legal basis for the contents of the Draft CAAPP Permit, moves into the factual description of the permit, and ends with supplemental information that has been provided to further assist with the understanding of the background and genesis of the permit content.

It is Illinois EPA's preliminary determination that this source's Permit Application meets the standards for issuance of a "Final" CAAPP Permit as stipulated in Section 39.5(10)(a) of the Illinois Environmental Protection Act (see Chapter I – Section 1.2 of this document). The Illinois EPA is therefore initiating the necessary procedural requirements to issue a Final CAAPP Permit. The Illinois EPA has posted the Draft CAAPP permit and this Statement of Basis on USEPA website:

http://www.epa.gov/reg5oair/permits/ilonline.html

CHAPTER I – LEGAL BASIS FOR THE PERMIT AND PERMIT CONDITIONS

1.1 Legal Basis for Program

The Illinois EPA's state operating permit program for major sources established to meet the requirements of 40 CFR Part 70 are found at Section 39.5 of the Illinois Environmental Protection Act [415 ILCS 5/39.5]. The program is called the Clean Air Act Permitting Program (CAAPP). The underlying statutory authority is found in the Illinois Environmental Protection Act at 415 ILCS 5/39.5. The CAAPP was given final full approval by USEPA on December 4, 2001 (see 66 FR 62946).

1.2 Legal Basis for Issuance of CAAPP Permit

In accordance with Section 39.5(10)(a) of the Illinois Environmental Protection Act, the Illinois EPA may only issue a CAAPP Permit if all of the following standards for issuance have been met:

- The applicant has submitted a complete and certified application for a permit, permit modification, or permit renewal consistent with Sections 39.5(5) and (14) of the Illinois Environmental Protection Act, as applicable, and applicable regulations (Section a. below);

- The applicant has submitted with its complete application an approvable compliance plan, including a schedule for achieving compliance, consistent with Section 39.5(5) of the Illinois Environmental Protection Act and applicable regulations (Section b. below);

- The applicant has timely paid the fees required pursuant to Section 39.5(18) of the Illinois Environmental Protection Act and applicable regulations (Section c. below); and

- The applicant has provided any additional information as requested by the Illinois EPA (Section d. below).

a. Application Status

The source submitted an application for a Renewal CAAPP Permit on December 10, 2009. The source is currently operating under an application shield resultant from a timely and complete renewal application submittal. This Draft CAAPP Permit addresses application content and necessary revisions to meet the requirements for issuance of the permit.

b. Present Compliance Status

At the time of this Draft CAAPP Permit, there were no pending State or Federal enforcement actions against the source; therefore, a Compliance Schedule is not required for this source. The source submitted an approvable Compliance Plan as part of its Certified Permit Application. The source has certified compliance with all applicable rules and regulations. In addition, the draft permit requires the source to certify its compliance status on an annual basis.

c. Payment of Fees

The source is current on payment of all fees associated with operation of the emission units.

d. Additional Information

The source provided all the necessary additional application material as requested by the Illinois EPA.

1.3 Legal Basis for Conditions in the CAAPP Permit

This industrial source is subject to Federal and SIP regulations, which are the legal basis for the conditions in this permit (see Sections a. and b. below). Also, the CAAPP provides the legal basis for additional requirements such as periodic monitoring, reporting, and recordkeeping. The following list summarizes those regulations that form the legal basis for the conditions in this Draft CAAPP Permit and are provided in the permit itself as the origin and authority.

a. Applicable Federal Regulations

40 CFR 63, Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants for Paper and Other Web Coating Operations

40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters

b. Applicable SIP Regulations

This source operates emission units that are subject to the following SIP regulations:

35 IAC Part 201 – Permits And General Provisions
35 IAC Part 205 – Emissions Reduction Market System
35 IAC Part 212 – Visible And Particulate Matter Emissions
35 IAC Part 216 – Carbon Monoxide Emissions
35 IAC Part 218 – Organic Material Emis Stnds And Lmtns For The Chicago Area
35 IAC Part 228 – Asbestos
35 IAC Part 244 – Episodes
35 IAC Part 254 – Annual Emissions Report

c. Other Applicable Requirements

There are no other applicable requirements for this source.

CHAPTER II – FACTUAL BASIS FOR THE PERMIT AND PERMIT CONDITIONS

2.1 Source History

There is no significant source history warranting discussion for this source.

2.2 Description of Source

SIC Code: 2672 and 2759
County: Cook

Color Communication, Inc. is located at 4000/4011/4242 West Fillmore Street in Chicago and produces color boards. The color board production consists of the paper/film coating and printing lines.

The source contains the following processes:

Emission Units	*Description*
Printing Line #1	Sheet-fed non-heatset offset lithographic printing line used to print on unpainted sheets of paper.
Printing Line #2	Sheet-fed non-heatset offset lithographic printing line used to print on unpainted sheets of paper.
Printing Line #4	Flexographic printing is performed on rolls of web from 6 to 16 inches in width. Either an alcohol-based ink or UV based ink is utilized.
Printing Line #5	Flexographic printing is performed on rolls of web from 6 to 16 inches in width. Either an alcohol-based ink or UV based ink is utilized.
Coating Line #1	Coating line applies latex and/or lacquer coating to paper and film substrate in the production of color boards.
Coating Line #3	Coating line applies latex and/or lacquer coating to paper and film substrate in the production of color boards with Catalytic Oxidizer.
Coating Line #4	Coating line applies latex and/or lacquer coating to paper and film substrate in the production of color boards.
Production Spray Line #1 (SL-1)	Coating line applies latex and/or lacquer coating to paper and film substrate in the production of color boards with Catalytic Oxidizer.
Boiler #5 (11.7 mmBtu/hr)	Natural gas-fired boilers are used to produce steam and comfort heating at this source.
Boiler #4 (9.2 mmBtu/h7r)	Natural gas-fired boilers are used to produce steam and comfort heating at this source.
Boiler #1 (4.5 mmBtu/hr)	Natural gas-fired boilers are used to produce steam and comfort heating at this source.
Boiler #2 (4.5 mmBtu/hr)	Natural gas-fired boilers are used to produce steam and comfort heating at this source.
Lacquer Color Matching Operations	Thousands of different colors are formulated to match customer's needs during a year. The thinning of lacquer is generally done in color matching as the proper viscosity has an important bearing on the correct color.

2.3 Single Source Status

This source does not have any collocated facilities that would be considered a single source with this facility based on information found in the certified application.

2.4 Ambient Air Quality Status for the Area

The source is located in an area that is currently designated nonattainment for the National Ambient Air Quality Standards for ozone (moderate nonattainment) and attainment or unclassifiable for all other criteria pollutants (carbon monoxide, lead, nitrogen dioxide, PM2.5, PM10, sulfur dioxide). (See 40 CFR Part 81 – Designation of Areas for Air Quality Planning Purposes)

2.5 Source Status

The source requires a CAAPP permit because this source was a major source of hazardous air pollutants at the time when 40 CFR 63, Subpart JJJJ, National Emission Standards for Hazardous Air Pollutants for Paper and Other Web Coating Operations, became applicable.

This source is considered a natural minor for the following regulated pollutants: PM_{10}, $PM_{2.5}$, nitrogen oxides (NO_x), volatile organic material (VOM), carbon monoxide (CO), sulfur dioxide (SO_2) and hazardous air pollutant (HAP). Based on available data, this source is not a major source of emissions for GHG. Color Communications, Inc. voluntarily submitted data on its emissions of GHG in its 2013 AER, reporting actual annual emissions of GHG of 2280.05 tons per year. The emissions consist of 2280.00 tons of CO2, 0.004 tons of N2O, and 0.04 tons of methane.

This source is not currently subject to any “applicable requirements,” as defined by Section 39.5(1) of the Act, for emissions of greenhouse gases (GHG) as defined by 40 CFR 86.1818-12(a), as referenced by 40 CFR 52.21(b)(49)(i). There are no GHG-related requirements under the Illinois Environmental Protection Act, Illinois’ State Implementation Plan, or the Clean Air Act that apply to this facility, including terms or conditions in a Construction Permit addressing emissions of GHG or BACT for emissions of GHG from a major project at this facility under the PSD rules. In particular, the USEPA’s Mandatory Reporting Rule for GHG emissions, 40 CFR Part 98, does not constitute an “applicable requirement” because it was adopted under the authority of Sections 114(a)(1) and 208 of the Clean Air Act. This permit also does not relieve the Permittee from the legal obligation to comply with the relevant provisions of the Mandatory Reporting Rule for this facility.

2.6 Annual Emissions

The following table lists annual emissions (tons) of criteria pollutants for this source, as reported in the Annual Emission Reports (AER) sent to the Illinois EPA:

Pollutant	*2013*	*2012*	*2011*
CO	1.59	1.78	1.76
NOx	1.79	2.12	2.10
PM	0.54	0.16	0.16
SO_2	0.01	0.01	0.01
VOM	32.40	29.80	36.10
CO_{2E}	2280.05	2542.0	2520.0

HAP toluene)	2.24	1.82	3.81
HAP (xylene)	0.06	0.04	0.08

2.7 Fee Schedule

The following table lists the approved annual fee schedule (tons) submitted in the Source's permit application:

Pollutant		*Tons/Year*
Volatile Organic Material	(VOM)	100.45
Sulfur Dioxide	(SO_2)	0.15
Particulate Matter	(PM)	1.86
Nitrogen Oxides	(NO_x)	24.5
HAP, not included in VOM or	(HAP)	–
Total		126.96

2.8 SIP Permit Facts (T1 Limits)

CAAPP Permits must address all "applicable requirements," which includes the terms and conditions of preconstruction permits issued under regulations approved by USEPA in accordance with Title I of the CAA (*See* definition of applicable requirements in Section 39.5(1) of the Illinois Environmental Protection Act). Preconstruction permits, commonly referred to in Illinois as Construction Permits, derive from the New Source Review ("NSR") permit programs required by Title I of the CAA. These programs include the two major NSR permit programs: (1) the Prevention of Significant Deterioration ("PSD") program[1] and (2) the nonattainment NSR program.[2] These programs also encompass state construction permit programs for projects that are not major.

In the CAAPP or Illinois's Title V permit program, the Illinois EPA's practice is to identify requirements that are carried over from an earlier Title I permit into a New or Renewed CAAPP Permit as "TI" conditions (i.e., Title I conditions). Title I Conditions that are revised as part of their incorporation into a CAAPP Permit are further designated as "TIR." Title I Conditions that are newly established through a CAAPP Permit are designated as "TIN." It is important that Title I Conditions be identified in a CAAPP Permit because these conditions will not expire when the CAAPP Permit expires. Because the underlying authority for Title I Conditions comes from Title I of the CAA and their initial establishment in Title I Permits, the effectiveness of T1 Conditions derives from Title I of the CAA rather than being linked to Title V of the A. For "changes" to be made to Title I Conditions, they must either cease to be applicable based on obvious circumstances, e.g., the subject emission unit is permanently shut down, or appropriate Title I procedures must be followed to change the conditions.

- Previously Incorporated Construction Permits:

Permit No.	*Date Issued*	*Subject*
03040043	2003	Coating line 4 (modification)
04070048	2004	Lithographic Printing Line #2

- Newly Issued Construction Permits:

Permit No.	*Date Issued*	*Subject*
05070045	2005	Coating Spray Line PSL-1

- Newly Issued Construction Permits For Projects Not Yet Constructed:[3]

Permit No.	*Date Issued*	*Subject*
12060025	1/27/2014	Coating Spray line #2 has not yet been constructed.

- The Illinois EPA has established a T1R condition in this permit but no T1N Limits have been established in this Draft CAAPP permit. Condition 4.1.2(c)(i)E has been revised.
- There are no extraneous or obsolete T1 conditions for the source.

CHAPTER III – SUPPLEMENTAL DISCUSSIONS REGARDING THE PERMIT

The information provided in this Chapter of the Statement of Basis is being provided to assist interested parties in understanding what additional information may have been relied on to support this draft CAAPP permit.

3.1 Environmental Justice Discussions

While the Illinois EPA is sensitive to the location of this facility in a potential EJ community, Title V does not provide for substantive emission control requirements beyond those arising under currently applicable regulations. Thus, when issuing a CAAPP Permit for this facility, the Illinois EPA does not have the authority to impose additional emission control requirements to reduce emissions beyond the levels provided for by applicable state and federal regulations. At the same time, CAAPP Permits do not allow for additional emissions.

Having a facility subject to a CAAPP Permit provides benefits for air quality, the public and the environment generally. CAAPP Permits require more reporting on a facility's compliance status than is required by underlying state operating permits. For example, the requirements for semi-annual reports for all monitoring and annual compliance certifications only become applicable upon the effectiveness of a CAAPP Permit. In addition, CAAPP Permits generally provide clarity and awareness of applicable regulations and the mechanisms by which sources must comply with these regulations. CAAPP Permits add to the compliance checks put on facilities. Where a facility has outstanding compliance deficiencies, CAAPP Permits may establish compliance schedules and other additional conditions for monitoring and reporting.

With this Statement of Basis, the Illinois EPA has made very clear the applicable emission limitations, standards, and other enforceable terms and conditions, as well as attendant monitoring, reporting, recordkeeping, and certifications to assure compliance. The Illinois EPA has provided an explanation of same, as well as a justification for why the conditions that assure compliance are appropriate. The level of detail in the Statement of Basis is atypically involved and is in recognition of the public interest in the permitting of this complex facility in a potential EJ community. The Statement of Basis has been provided to the USEPA for its review. The extremely detailed explanation of the requirements, particularly Periodic Monitoring, applicable to this source is intended to further meaningful public participation.

3.2 Emission Testing Results

The source has performed the following emission testing on the oxidizer:

January 10, 2007

Test No.	*Inlet VOC Emissions (lb/hr)*	*Outlet VOC Emissions (lb/hr)*	*Destruction Efficiency (%)*	*Compliance Margin*
1	91.07	0.26	99.69	
2	102.18	0.26	99.74	
3	117.0	0.36	99.69	
Average	103.42	0.30	99.71	10.79 % more efficient than

				requirement

May 30, 2006

Test No.	*Inlet VOC Emissions (lb/hr)*	*Outlet VOC Emissions (lb/hr)*	*Destruction Efficiency (%)*	*Compliance Margin*
1	96.61	0.16	99.83	
2	97.47	0.18	99.82	
3	102.14	0.33	99.68	
Average	103.42	0.22	99.78	10.87 % more efficient than requirement

3.3 Compliance Reports (Annual Certifications, Semiannual Monitoring, NESHAP, etc.)

A review of the source's compliance reports demonstrates the sources ability to comply with all applicable requirements.

3.4 Field Inspection Results

A review of the source's latest field inspection report dated 1/20/2012 demonstrates the source's ability to comply with all applicable requirements.

3.5 Historical Non-Compliance

The source has had no historical non-compliance for the last 8 years.

3.6 Source Wide Justifications and Rationale

Applicable Requirements Summary		
Applicable Requirement	Type	Location
Fugitive Particulate Matter (35 IAC 212.301 and 35 IAC 212.314)	Applicable Standard	See the Permit, Condition 3.1(a)

Particulate Matter Emission

✓ Monitoring as follows (Condition 3.1(a)(ii)):
- o Daily visible observations shall be performed upon request from IEPA.

✓ Recordkeeping as follows (Condition 3.1(a)(ii)):
- o Records of any observations.

✓ Reporting as follows (Condition 3.5(a)(i)):
- o Report to IEPA any deviation within 30 days.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for the source because:

- The source is not involved in classical extensive "material handling activities", therefore, there is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.

- Emissions are considered negligible

Non-Applicability Discussion

Complex source-wide non-applicability determinations were not made for this source.

Prompt Reporting Discussion

Prompt reporting of deviations for source wide emission units has been established as 30 days. See rationale in Chapter III Section 3.9.

3.7 Emission Unit Justifications and Rationale

1. Sheet-fed, Non-Heatset Offset Lithographic Printing Operation Lines #1 and #2		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
Opacity Requirement (35 IAC 212.123)	Applicable Standard	See the Permit, Condition 4.1.2(a)(i)(A)
PM Requirement (35 IAC 212.321)	Applicable Standard	See the Permit, Condition 4.1.2(b)(i)(A)
VOM Requirement (35 IAC 218.301, 218.407(a)(3) and 218.407(a)(4))	Applicable Standard	See the Permit, Condition 4.1.2(c)(i)(A), (B) and (C)
VOM Requirement	Applicable Limit	See the Permit, Condition 4.1.2(c)(i)(D) and (E)
Work Practice Requirement	Applicable Work Practice	See the Permit, Condition 4.1.2(d)(i)(A) and (B)

Visible Emissions (i.e., Opacity)

✓ Monitoring as follows (Condition 4.1.2(a)(ii)(A)):
- o Annual Method 22 observations
- o If required, Method 9 measurements

✓ Recordkeeping as follows (Condition 4.1.2(a)(ii)(B & C)):
- o Records for each Method 22 observation
- o If required, records for each Method 9 measurement

✓ Reporting as follows (Condition 4.1.5(a)):
- o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Annual observations of opacity, including records of these observations, are sufficient to verify compliance with the 30% opacity limit for the presses. The likelihood of a visible emission violation is small for a printing press.

- The inspections required, in Condition 4.1.2(d)(ii)(A), ensure that the presses are in proper working condition. If the presses are properly maintained and operated under proper working conditions, visible emissions will be minimal.

Particulate Matter Emission

✓ Recordkeeping as follows (Condition 4.1.2(b)(ii)(A)):
- o Records of the hours of operation for each printing press.
- o Records of the emissions of PM from the printing presses, with supporting calculations.

✓ Reporting as follows (Condition 4.1.5(a)):
Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring
Periodic Monitoring is sufficient for these emission units because:
- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- The inspections required, in Condition 4.1.2(d)(ii)(A), ensure that the presses are in proper working condition. If the presses are properly maintained and operated under proper working conditions, PM emissions should be minimal.
- The recordkeeping above will allow for a calculation to be made that will demonstrate compliance with the applicable standards set forth by the process weight rate rules for the presses.

Organic Material Emission

✓ Monitoring as follows (Condition 4.1.2(c)(ii)(A) and (B)
- o Automatic feed equipment calibrated, operated and maintained according to manufacturer specifications.

✓ Testing as follows (Condition 4.1.2(c)(ii)(C)
- o Annual VOM content of as applied solution via Method 24
- o Annual VOM content of cleaning solvents by Method 24 or Method 24A

✓ Recordkeeping as follows (Condition 4.1.2(c)(ii)(G), 4.1.2(c)(ii)(E) and (F):
- o Records of the VOM content of the as-applied fountain solution.
- o Records of the VOM content of each cleaning solvent/solution.
- o Records of the usage of each fountain solution and cleaning solvent/solution used.
- o Records of the hours of operation for each press.
- o Records of the VOM emissions.
- o Records of automatic batch feed settings
- o Records of molecular weight, density and VOM partial vapor pressure of solvents
- o Records of maintenance and repair

✓ Reporting as follows (Condition 4.1.5(a)):
- o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- With the required records, a calculation can be made to ensure compliance with the applicable VOM limit for the presses. Knowing the usage of each material used on the press combined with the VOM content of each material used on the press, VOM emissions as a result of each press can be found. Usage x VOM content = VOM emissions; with a conservative approach, it can be assumed that all VOM applied is directly emitted therefore ensuring the source is in compliance with the limits. Then, knowing the hours of operation of each press, the VOM emissions can be divided by hours of operation to give VOM emissions (lb or ton) per hour of operation --giving (lb/hr).
- It should also be noted that the VOM content requirements to test and monitor the VOM content of the fountain solutions and cleaning materials can be used to help verify compliance with this applicable standard.
- Noting that VOM content and vapor pressure of these materials should not vary significantly because the source generally uses exactly the same or vary similar fountain solutions and the auto feed equipment has a VOM content limit for each setting that is used.
- It should also be noted that the monitoring, testing, and recordkeeping requirements that are imposed by the permit are from SIP approved standards. Preventative manufacturer recommended maintenance on the press and monthly inspections of VOM-containing material storage ensure proper press operation
- T1N limitations reflect changes from the initial CAAPP permit and contain revisions to previously issued Construction Permit 97120039, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. These limits continue to ensure that the construction and/or modification addressed in this construction permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this construction permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, material usage limits on fountain solution and solvents have been removed to allow source more flexibility without any increase of VOM emissions. These new limits reflect 95% retention for oldest inks used on the printing line #1. Compliance with annual limits shall be determined from a running total of 12 months of data.

Non-Applicability Discussion

Complex non-applicability determinations were not made for this emission unit. All non-applicability discussions can be found in the Draft CAAPP Permit.

Prompt Reporting Discussion

Prompt reporting of deviations has been established as 30 days. See rationale in Chapter III Section 3.9.

2. Flexographic Printing Operation Lines #4 and #5		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
Opacity Requirement (35 IAC 212.123)	Applicable Standard	See the Permit, Condition 4.2.2(a)(i)(A)
PM Requirement (35 IAC 212.321)	Applicable Standard	See the Permit, Condition 4.2.2(b)(i)(A)
VOM Requirement (35 IAC 218.301(a) and (b))	Applicable Standard	See the Permit, Condition 4.2.2(c)(i)(A), (B)
VOM Limit	Applicable Limit	See the Permit, Condition 4.2.2(c)(i)(C)
Work Practice Requirement	Applicable Work Practice	See the Permit, Condition 4.2.2(d)(i)(A)
Work Practice Requirement (35 IAC 218.187(d))	Applicable Standard	See the Permit, Condition 4.2.2(d)(i)(B)

Visible Emissions (i.e., Opacity)

✓ Monitoring as follows (Condition 4.2.2(a)(ii)(A)):
- o Annual Method 22 observations
- o If required, Method 9 measurements

✓ Recordkeeping as follows (Condition 4.2.2(a)(ii)(B & C)):
- o Records for each Method 22 observation
- o If required, records for each Method 9 measurement

✓ Reporting as follows (Condition 4.2.5(a)):
- o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for this emission unit because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Annual observations of opacity, including records of these observations, are sufficient to verify compliance with the 30% opacity limit for the press. The likelihood of a visible emission violation is small for a printing press.
- The inspections required, in Condition 4.2.2(d)(ii)(A), ensure that the printing lines are in proper working condition. If the printing lines are properly maintained and operated under proper working conditions, visible emissions should be minimal.

Particulate Matter Emission

✓ Recordkeeping as follows (Condition 4.2.2(b)(ii)(A)):
- o Records of the hours of operation for each printing press.
- o Records of the emissions of PM from the printing press, with supporting calculations.

✓ Reporting as follows (Condition 4.2.5(a)):

Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring
Periodic Monitoring is sufficient for this emission unit because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- The inspections required, in Condition 4.2.2(d)(ii)(B), ensure that the presses are in proper working condition. If the press is properly maintained and operated under proper working conditions, PM emissions should be minimal.
- The recordkeeping above will allow for a calculation to be made that will demonstrate compliance with the applicable standards set forth by the process weight rate rules for the press.

Organic Material Emission

✓ Testing as follows (Condition 4.2.2(c)(ii)(A) and (B)):
  - o Annual VOM content of as applied solution via Method 24 or manufacturer specifications consistent with Method 24
  - o Annual partial vapor pressure tests or manufacturer equivalent specifications

✓ Recordkeeping as follows (Condition 4.2.2(c)(ii)(C, D, E and F)) :
  - o Records of the name and ID of each coating and ink as applied.
  - o Records of the VOM content of each coating, ink and cleaning solvent as applied each day.
  - o The hours of operation for the printing press, hr/mo and hr/yr.
  - o Records of the emissions of VOM, tons/mo and ton/yr (12 month rolling average), with supporting calculations.
  - o Records of VOM composite partial pressure
  - o Records of tests

✓ Reporting as follows (Condition 4.2.5(a)):
  - o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring
Periodic Monitoring is sufficient for this emission unit because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- The requirements to record the VOM emissions and hours of operation is sufficient to demonstrate compliance with the applicable standard
- The requirements to record the VOM content of the cleaning solution, backed by testing, if required, is sufficient to demonstrate compliance with the applicable standard. Noting that VOM content and vapor pressure of these materials should not vary significantly because the source generally uses the same or vary similar solutions.
- It should also be noted that the monitoring, testing, and recordkeeping requirements that are imposed by the permit are from SIP approved standards.

- Preventative manufacturer recommended maintenance on the press and monthly inspections of VOM-containing material storage ensure proper press operation

Non-Applicability Discussion

Complex non-applicability determinations were not made for this emission unit. All non-applicability discussions can be found in the Draft CAAPP Permit.

Prompt Reporting Discussion

Prompt reporting of deviations has been established as 30 days. See rationale in Chapter III Section 3.9.

3.7 Emission Unit Justifications and Rationale

3. Coating Lines #1, #3, #PSL-1 and #4 with Ovens		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
Opacity Requirement (35 IAC 212.123)	Applicable Standard	See the Permit, Condition 4.3.2(a)(i)(A)
PM Requirement (35 IAC 212.321)	Applicable Standard	See the Permit, Condition 4.3.2(b)(i)(A)
SO2 Requirement	Applicable Standard	See the Permit Condition 4.3.2(c)(i)(A)
VOM Requirement (35 IAC 218.207 and 218.204)	Applicable Standard	See the Permit, Condition 4.3.2(d)(i)(A) and (B)
VOM Limit	Applicable Limits	See the Permit, Condition 4.3.2(d)(i)(C, D, E and F)
Work Practice Requirement	Applicable Work Practice	See the Permit, Condition 4.3.2(f)(i)(A)
HAPs Requirements (40 CFR 63.3320)	Applicable Standard	See the Permit, Condition 4.3.2(e)(i)(A)

Visible Emissions (i.e., Opacity)

✓ Monitoring as follows (Condition 4.3.2(a)(ii)(A)):
- o Annual Method 22 observations
- o If required, Method 9 measurements

✓ Recordkeeping as follows (Condition 4.3.2(a)(ii)(B & C)):
- o Records for each Method 22 observation
- o If required, records for each Method 9 measurement

✓ Reporting as follows (Condition 4.3.5(a)):
- o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring
Periodic Monitoring is sufficient for these emission units because:
- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.

- Annual observations of opacity, including records of these observations, are sufficient to verify compliance with the 30% opacity limit for the presses. The likelihood of a visible emission violation is small for a printing press.
- The preventive maintenance required, in Condition 4.3.2(d)(ii)(C), ensures that the coating lines are in proper working condition. If the coating lines are properly maintained and operated under proper working conditions, visible emissions will be minimal.

Particulate Matter Emission

✓ Recordkeeping as follows (Condition 4.3.2(b)(ii)(A)):
  - o Records of the hours of operation for each coating line.
  - o Records of the emissions of PM from the printing presses, with supporting calculations.

✓ Reporting as follows (Condition 4.3.5(a)):
Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring
Periodic Monitoring is sufficient for these emission units because:
- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- The preventive maintenance required, in Condition 4.3.2(d)(ii)(C), ensure that the coating lines are in proper working condition. If the coating lines are properly maintained and operated under proper working conditions, PM emissions should be minimal.
- The recordkeeping above will allow for a calculation to be made that will demonstrate compliance with the applicable standards set forth by the process weight rate rules for the coating lines.

Sulfur Emissions
✓ Monitoring as follows (Condition 4.3.2(c)(i)(A))
  - o Type of fuel

✓ Recordkeeping as follows (Condition 4.3.2(c)(ii)(A):
  - o Type of fuel and gas company certification

✓ Reporting as follows (Condition 4.3.5):
  - o Prompt reporting in 30 days

Rationale and Justification for Periodic Monitoring
Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Pursuant to 40 CFR 72.2 to be considered Pipeline quality natural gas it must contain 0.5 grains or less of total sulfur per 100 standard cubic feet.

Content limited that would result in SO_2 emission less than the limit 2,000 ppm.

Organic Material Emission

- ✓ Monitoring as follows (Condition 4.3.2(d)(ii)(A-D)
  - o Annual testing of VOM coatings as applied by Method 24 or 24A
  - o Annual VOM content testing of clean up solvents by Method 24 or 24A or equivalent manufacturer documentation
  - o Method 204 testing for permanent total enclosure within 5 years
  - o Control device efficiency determined within five years of permit issuance
  - o Continuous temperature monitor

- ✓ Recordkeeping as follows (Condition 4.3.2(d)(ii)(G-J) :
  - o Daily records of coating ID number, weight of VOM per volume, weight of VOM per solids
  - o Control device monitoring data including operating time and maintenance log
  - o Monthly and annual VOM emissions and coating usage

- ✓ Reporting as follows (Condition 4.3.5(a)):
  - o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- VOM content in coatings and capture and control efficiency recordkeeping is based on SIP approved test methods and procedures
- Maintenance according to manufacturer recommendations
- Monthly inspections of capture and control systems and safe handling/storage of VOM materials all ensure VOM emissions are minimized.

HAP Emissions

- ✓ Monitoring as follows (Condition 4.3.4(e)(ii)(
  - o Various NESHAP required compliance demonstrations depending on the method of compliance
  - o Continuous parameter monitoring system when control device used
  - o Continuous temperature monitor with recorder
  - o Site specific monitoring plan related to capture and control

- ✓ Recordkeeping as follows (Condition 4.3.2(e)(ii)(L),:

  - o Records of the Control device monitoring data for the oxidizers.
  - o Records of the log of the operating time for the capture system, control device, monitoring equipment and the printing/coating operation.
  - o Records of the maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
  - o Records of the most recent stack test report for each oxidizer.
  - o Monthly records of all compliance demonstrations

- ✓ Reporting as follows (Condition 4.3.5(a)):
  - o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- The source has a substantial margin of compliance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- The NESHAP monitoring and extensive record keeping requirements are sufficient to demonstrate compliance with the standard

Non-Applicability Discussion

Complex non-applicability determinations were not made for this emission unit. All non-applicability discussions can be found in the Draft CAAPP Permit.

Prompt Reporting Discussion

Prompt reporting of deviations has been established as 30 days. See rationale in Chapter III Section 3.9.

4. Lacquer Color Matching Operations		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
Opacity Requirement (35 IAC 212.123)	Applicable Standard	See the Permit, Condition 4.4.2(a)(i)(A)
PM Requirement (35 IAC 212.321)	Applicable Standard	See the Permit, Condition 4.4.2(b)(i)(A)
VOM Requirement (35 IAC 218.301)	Applicable Standard	See the Permit, Condition 4.4.2(c)(i)(A)

Visible Emissions (i.e., Opacity)

✓ Monitoring as follows (Condition 4.4.2(a)(ii)(A)):
- o Annual Method 22 observations
- o If required, Method 9 measurements

✓ Recordkeeping as follows (Condition 4.4.2(a)(ii)(B & C)):
- o Records for each Method 22 observation
- o If required, records for each Method 9 measurement

✓ Reporting as follows (Condition 4.4.5(a)):
- o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Annual observations of opacity, including records of these observations, are sufficient to verify compliance with the 30% opacity limit for the gluing machines. The likelihood of a visible emission violation is small for a Lacquer Color Matching Operations.

Particulate Matter Emission

- ✓ Recordkeeping as follows (Condition 4.4.2(b)(ii)(A)):
  - o Records of the hours of operation for Lacquer Color Matching Operations .
  - o Records of the emissions of PM from the Lacquer Color Matching Operations, with supporting documentation.

- ✓ Reporting as follows (Condition 4.4.5(a)):
  - o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring
Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- The recordkeeping above will allow for a calculation to be made that will demonstrate compliance with the applicable standards set forth by the process weight rate rules for the Lacquer Color Matching Operations.

Organic Material Emission (35 IAC 218.301) – Condition 4.4.2(c)(i)(A)

- ✓ Testing as follows (Condition 4.4.2(c)(ii)(B)):
  - o If required, Method 24 must be conducted to determine that the recorded VOM content of the coatings is accurate. The Permittee can use manufacture's specs if it is in accordance with Method 24.

- ✓ Recordkeeping as follows (Condition 4.4.2(c)(ii)(C)):
  - o Records of the amount of processed matched colors per month and per year.
  - o Records of the VOM usage for each processed match color.
  - o Records of the total VOM emissions from affected color matching operations, in terms of tons per month and tons per year with supporting calculations.

- ✓ Reporting as follows (Condition 4.4.5(a)):
  - o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring
Periodic Monitoring is sufficient for these emission units because:

- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- The requirements to record the VOM usage and the amount of processed matched colors per month is sufficient to demonstrate compliance with the applicable standard.
- Compliance for VOM emissions can be determined by calculation due to operating hours are recorded.

Non-Applicability Discussion

Complex non-applicability determinations were not made for this emission unit. All non-applicability discussions can be found in the Draft CAAPP Permit.

Prompt Reporting Discussion

Prompt reporting of deviations has been established as 30 days. See rationale in Chapter III Section 3.9.

5. Natural Gas-Fired Boilers		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
Opacity Requirement (35 IAC 212.123)	Applicable Standard	See the Permit, Condition 4.5.2(a)(i)(A)
CO Requirement (35 IAC 216.121)	Applicable Standard	See the Permit, Condition 4.5.2(b)(i)(A)
Work Practice Requirement	Applicable Work Practice	See the Permit, Condition 4.5.2(d)(i)(A)

Visible Emissions (i.e., Opacity)

✓ Monitoring as follows (Condition 4.5.2(a)(ii)(A)):
- o Annual visible emission observations by using Method 22
- o If required, Method 9 measurements

✓ Recordkeeping as follows (Condition 4.5.2(a)(ii)(B) & (C)):
- o Records for each Method 22 observation
- o If required, records for each Method 9 measurement

✓ Reporting as follows (Condition 4.5.5(a)):
- o Prompt reporting of deviations within 30 days to the IEPA

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Annual observations of opacity, including records of these observations, are sufficient to verify compliance with the 30% opacity limit for boilers that combust pipeline quality natural gas which has low particulate content. The likelihood of these boilers violating opacity is small. It should also be noted that the source is also required to maintain the type of fuel used, maintain inspection records, and maintain maintenance and repair logs of the boilers. These records would help the Illinois EPA determine if the boilers are being operated properly and therefore would result in opacity being minimized. Because these boilers use pipeline quality natural gas that contains low PM content and coupled with the boiler monthly inspections, boiler efficiency is maintained reducing the likelihood of visible emissions.

Carbon Monoxide Emissions

✓ Periodic monitoring required by the Operational and Production Requirements (Condition 4.5.2(d)) and Work Practice Requirements (Condition 4.5.2(e)) are sufficient to demonstrate compliance with the applicable CO regulations.

- ✓ Monitoring as follows (Condition 4.5.2(e)(ii)(A)):
  - o Monthly inspections of the boilers and associated auxiliary equipment.

- ✓ Recordkeeping as follows (Condition 4.5.2(d)(ii)):
  - o Records for the type of fuel fired.
  - o Records of the fuel usage.

- ✓ Recordkeeping as follows (Condition 4.5.2(e)(ii)(A)):
  - o Records related to monthly inspections.

- ✓ Reporting as follows (Condition 4.5.5(a)):
  - o Prompt reporting of deviations within 30 days to the IEPA

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- The tune-ups required under the work practice section requires 5 year tune-ups for these boilers will ensure that proper combustion techniques are in place and the boilers are properly operating. Therefore, reducing the CO emissions from the boilers.

Non-Applicability Discussion

Complex non-applicability determinations were not made for this emission unit. All non-applicability discussions can be found in the Draft CAAPP Permit.

Prompt Reporting Discussion

Prompt reporting of deviations has been established as 30 days. See rationale in Chapter III Section 3.9.

3.8 Insignificant Activities Discussion

Applicable Requirements Summary		
Applicable Requirement	Type	Location
35 IAC 218.204(c)	Applicable Standard	See the Permit, Condition 6.1(a)(i)

Organic Material Emission

- Records of the VOM Contents.
- Records of the name and identification number of each coating as applied on each coating line;
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.

3.9 Prompt Reporting Discussion

Among other terms and conditions, CAAPP Permits contain reporting obligations to assure compliance with applicable requirements. These reporting obligations are generally four-fold. More specifically, each CAAPP Permit sets forth any reporting requirements specified by state or federal law or regulation, requires prompt reports of deviations from applicable requirements, requires reports of deviations from required monitoring and requires a report certifying the status of compliance with terms and conditions of the CAAPP Permit over the calendar year.

The number and frequency of reporting obligations in any CAAPP Permit is source-specific. That is, the reporting obligations are directly related to factors, including the number and type of emission units and applicable requirements, the complexity of the source and the compliance status. This four-fold approach to reporting is common to virtually all CAAPP Permits as described below. Moreover, this is the approach established in the Draft CAAPP Permit for this source.

Regulatory Reports

Many state and federal environmental regulations establish reporting obligations. These obligations vary from rule-to-rule and thus from CAAPP source to CAAPP source and from CAAPP Permit to CAAPP Permit. The variation is found in the report triggering events, reporting period, reporting frequency and reporting content. Regardless, the CAAPP makes clear that all reports established under applicable regulations shall be carried forward into the CAAPP Permit as stated in Section 39.5(7)(b) of the Illinois Environmental Protection Act. Generally, where sufficiently detailed to meet the exacting standards of the CAAPP, the regulatory reporting requirements are simply restated in the CAAPP Permit. Depending on the regulatory obligations, these regulatory reports may also constitute a deviation report as described below.

The Draft CAAPP Permit for this source would embody all regulatory reporting as promulgated under federal and state regulations under the Clean Air Act and the Illinois Environmental Protection Act. Depending on the frequency of the report, the regulatory report may also satisfy the prompt reporting obligations discussed below. These reports must be certified by a responsible official.

These reports are generally found in the reporting sections for each emission unit group. The various regulatory reporting requirements are summarized in the table at the end of this Reporting Section.

Deviation Reports (Prompt Reporting)

Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act mandates that each CAAPP Permit require prompt reporting of deviations from the permit requirements.

Neither the CAAPP nor the federal rules upon which the CAAPP is based and was approved by USEPA define the term “prompt”. Rather, 40 CFR Part 70.6(a)(3)(iii)(B) intended that the term have flexibility in application. The USEPA has acknowledged for purposes of administrative efficiency and clarity that the permitting authority (in this case, Illinois EPA) has the discretion to define “prompt” in relation to the degree and type of deviation likely to occur at a particular source. The Illinois EPA follows this approach and defines prompt reporting on a permit-by-permit basis. In instances where the underlying applicable requirement contains “prompt” reporting, the Illinois EPA typically incorporates the pre-established timeframe in the CAAPP permit (e.g.

a NESHAP or NSPS deviation report). Where the underlying applicable requirement fails to explicitly set forth the timeframe for reporting deviations, the Illinois EPA generally uses a timeframe of 30 days to define prompt reporting of deviations.

This approach to prompt reporting of deviations as discussed herein is consistent with the requirements of Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act as well as 40 CFR Part 70 and the CAA. The reporting arrangement is designed so that the source will appropriately notify the Illinois EPA of those events that might warrant attention. The timing for these event-specific notifications is necessary and appropriate as it gives the source enough time to conduct a thorough investigation into the causes of an event, collecting any necessary data, and developing preventive measures, to reduce the likelihood of similar events, all of which must be addressed in the notification for the deviation, while at the same time affording regulatory authority and the public timely and relevant information. The approach also affords the Illinois EPA and USEPA an opportunity to direct investigation and follow-up activities, and to make compliance and enforcement decisions in a timely fashion.

The Draft CAAPP Permit for this source would require prompt reporting as required by the Illinois Environmental Protection Act in the fashion described in this subsection. In addition, pursuant to Section 39.5(7)(f)(i) of the Illinois Environmental Protection Act, this Draft CAAPP Permit would also require the source to provide a summary of all deviations with the Semi-Annual Monitoring Report. These reports must be certified by a responsible official, and are generally found in the reporting sections for each emission unit group.

Semi-Annual Monitoring Reports

Section 39.5(7)(f)(i) of the Illinois Environmental Protection Act mandates that each CAAPP Permit require a report relative to monitoring obligations as set forth in the permit. Depending upon the monitoring obligation at issue, the semi-annual monitoring report may also constitute a deviation report as previously discussed. This monitoring at issue includes instrumental and non-instrumental emissions monitoring, emissions analyses, and emissions testing established by state or federal laws or regulations or as established in the CAAPP Permit. This monitoring also includes recordkeeping. Each deviation from each monitoring requirement must be identified in the relevant semi-annual report. These reports provide a timely opportunity to assess for compliance patterns of concern. The semi-annual reports shall be submitted regardless of any deviation events. Reporting periods for semi-annual monitoring reports are January 1 through June 30 and July 1 through December 31 of each calendar year. Each semi-annual report is due within 30 days after the close of reporting period. The reports shall be certified by a responsible official. The Draft CAAPP Permit for this source would require such reports at Condition 3.5(b).

Annual Compliance Certifications

Section 39.5(7)(p)(v) of the Illinois Environmental Protection Act mandates that each CAAPP Permit require a source to submit a certification of its compliance status with each term and condition of its CAAPP Permit. The reports afford a broad assessment of a CAAPP sources compliance status. The CAAPP requires that this report be submitted, regardless of compliance status, on an annual basis. Each CAAPP Permit requires this annual certification be submitted by May 1 of the year immediately following the calendar year reporting period. The report shall be certified by a responsible official.

The Daft CAAPP Permit for this source would require such a report at Condition 2.6(a).

Prompt reporting of deviations is critical in order to have timely notice of deviations and the opportunity to respond, if necessary. The effectiveness of the permit depends upon, among other important elements, timely and accurate reporting. The Illinois EPA, USEPA, and the public rely on timely and accurate reports submitted by the source to measure compliance and to direct investigation and follow-up activities. Prompt reporting is evidence of the source's good faith in disclosing deviations and describing the steps taken to return to compliance and prevent similar incidents.

Any occurrence that results in an excursion from any emission limitation, operating condition, or work practice standard as specified in this Draft CAAPP Permit is a deviation subject to prompt reporting. Additionally, any failure to comply with any permit term or condition is a deviation of that permit term or condition and must be reported to the Illinois EPA as a permit deviation. The deviation may or may not be a violation of an emission limitation or standard. A permit deviation can exist even though other indicators of compliance suggest that no emissions violation or exceedance has occurred. Reporting permit deviations does not necessarily result in enforcement action. The Illinois EPA has the discretion to take enforcement action for permit deviations that may or may not constitute a deviation from an emission limitation or standard or the like, as necessary and appropriate.

As a result, the Illinois EPA's approach to prompt reporting of deviations as discussed herein is consistent with the requirements of Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act as well as 40 CFR Part 70 and the CAA. This reporting arrangement is designed so that the source will appropriately notify the Illinois EPA of those events that might warrant individual attention.

3.10 Emissions Reduction Market System (ERMS)

The Emissions Reduction Market System (ERMS) is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source shall have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in

its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

3.11 Incorporation by Reference Discussion

Based on guidance found in White Paper 2 and past petition responses by the Administrator, it is recognized that Title V permit authorities may, within their discretion, incorporate plans by reference. As recognized in the *White Paper 2,* permit authorities can effectively streamline the contents of a Title V permit, avoiding the inevitable clutter of restated text and preventing unnecessary delays where, as here, permit issuance is subject to a decision deadline.[4] However, it is also recognized that the benefits of incorporation of plans must be carefully balanced by a permit authority with its duty to issue permits in a way that is "clear and meaningful" to the Permittee and the public.[5]

The criteria that are mentioned in USEPA Administrator Petition Responses stress the importance of identifying, *with specificity*, the object of the incorporation.[6] The Illinois EPA agrees that such emphasis is generally consistent with USEPA's pronouncements in previous guidance.

For each condition incorporating a plan, the Illinois EPA is also briefly describing the general manner in which the plan applies to the source. Identifying the nature of the source activity, the regulatory requirements or the nature of the equipment associated with the plan is a recommendation of the *White Paper 2*[7]. The Illinois EPA has stopped short of enumerating the actual contents of a plan, as restating them in the permit would plainly defeat the purpose of incorporating the document by reference and be contrary to USEPA guidance on the subject.[8]

Plans may need to be revised from time to time, as occasionally required by circumstance or by underlying rule or permit requirement. Except where expressly precluded by the relevant rules, this Draft CAAPP Permit allows the Permittee to make future changes to a plan without undergoing formal permit revision procedures. This approach will allow flexibility to make required changes to a plan without separately applying for a revised permit and, similarly, will lessen the impacts that could result for the Illinois EPA if every change to a plan's contents required a permitting transaction.[9] Changes to the incorporated plans during the permit term are automatically incorporated into the Draft CAAPP Permit unless the Illinois EPA expresses a written objection.

The Draft CAAPP Permit incorporates by reference the following plans: CAM Plan.

3.12 Periodic Monitoring General Discussions

Pursuant to Section 504(c) of the Clean Air Act, a Title V permit must set forth monitoring requirements, commonly referred to as "Periodic Monitoring," to assure compliance with the terms and conditions of the permit. A general discussion of Periodic Monitoring is provided below. The Periodic Monitoring that is proposed for specific operations and emission units and at this source is discussed in Chapter III of this Statement of Basis. Chapter III provides a narrative discussion of and justification for the elements of Periodic Monitoring that would apply to the different emission units and types of emission units at the facility.

As a general matter, the required content of a CAAPP Permit with respect to such Periodic Monitoring is addressed in Section 39.5(7) of the Illinois Environmental Protection Act.[10] Section 39.5(7)(b) of the Illinois Environmental Protection Act[11] provides that in a CAAPP Permit:

> The Agency shall include among such conditions applicable monitoring, reporting, record keeping and compliance certification requirements, as authorized by paragraphs d, e, and f of this subsection, that the Agency deems necessary to assure compliance with the Clean Air Act, the regulations promulgated thereunder, this Act, and applicable Board regulations. When monitoring, reporting, record keeping and compliance certification requirements are specified within the Clean Air Act, regulations promulgated thereunder, this Act, or applicable regulations, such requirements shall be included within the CAAPP Permit.

Section 39.5(7)(d)(ii) of the Illinois Environmental Protection Act further provides that a CAAPP Permit shall:

> Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), require Periodic Monitoring sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit …

Accordingly, the scope of the Periodic Monitoring that must be included in a CAAPP Permit is not restricted to monitoring requirements that were adopted through rulemaking or imposed through permitting. When applicable regulatory emission standards and control requirements or limits and control requirement in relevant Title 1 permits are not accompanied by compliance procedures, it is necessary for Monitoring for these standards, requirements or limits to be established in a CAAPP Permit.[12, 13] Monitoring requirements must also be established when standards and control requirement are accompanied by compliance procedures but those procedures are not adequate to assure compliance with the applicable standards or requirements.[14, 15] For this purpose, the requirements for Periodic Monitoring in a CAAPP Permit may include requirements for emission testing, emissions monitoring, operational monitoring, non-instrumental monitoring, and recordkeeping for each emission unit or group of similar units at a facility, as required by rule or permit, as appropriate or as needed to assure compliance with the applicable substantive requirements. Various combinations of monitoring measures will be appropriate for different emission units depending on their circumstances, including the substantive emission standards, limitations and control requirements to which they are subject.

What constitutes sufficient Periodic Monitoring for particular emission units, including the timing or frequency associated with such Monitoring requirements,

must be determined by the permitting authority based on its knowledge, experience and judgment.[16] For example, as Periodic Monitoring must collect representative data, the timing of Monitoring requirements need not match the averaging time or compliance period of the associated substantive requirements, as set by the relevant regulations and permit provisions. The timing of the various requirements making up the Periodic Monitoring for an emission unit is something that must be considered when those Monitoring requirements are being established. For this purpose, Periodic Monitoring often consists of requirements that apply on a regular basis, such as routine recordkeeping for the operation of control devices or the implementation of the control practices for an emission unit. For certain units, this regular monitoring may entail "continuous" monitoring of emissions, opacity or key operating parameters of a process or its associated control equipment, with direct measurement and automatic recording of the selected parameter(s). As it is infeasible or impractical to require emissions monitoring for most emission units, instrumental monitoring is more commonly conducted for the operating parameters of an emission unit or its associated control equipment. Monitoring for operating parameter(s) serves to confirm proper operation of equipment, consistent with operation to comply with applicable emission standards and limits. In certain cases, an applicable rule may directly specify that a particular level of an operating parameter be maintained, consistent with the manner in which a unit was being operated during emission testing. Periodic Monitoring may also consist of requirements that apply on a periodic basis, such as inspections to verify the proper functioning of an emission unit and its associated controls.

The Periodic Monitoring for an emission unit may also include measures, such as emission testing, that would only be required once or only upon specific request by the Illinois EPA. These requirements would always be accompanied by Monitoring requirements would apply on a regular basis. When emission testing or other measure is only required upon request by the Illinois EPA, it is included as part of the Periodic Monitoring for an emission unit to facilitate a response by the Illinois EPA to circumstances that were not contemplated when Monitoring was being established, such as the handling of a new material or a new mode of operation. Such Monitoring would also serve to provide further verification of compliance, along with other potentially useful information. As emission testing provides a quantitative determination of compliance, it would also provide a determination of the margin of compliance with the applicable limit(s) and serve to confirm that the Monitoring required for an emission unit on a regular basis is reliable and appropriate. Such testing might also identify specific values of operating parameters of a unit or its associated control equipment that accompany compliance and can be relied upon as part of regular Monitoring.

There are a number of considerations or factors that are or may be relevant when evaluating the need to establish new monitoring requirements as part of the Periodic Monitoring for an emission unit. These factors include: (1) The nature of the emission unit or process and its emissions; (2) The variability in the operation and the emissions of the unit or process over time; (3) The use of add-on air pollution control equipment or other practices to control emissions and comply with the applicable substantive requirement(s); (4) The nature of that control equipment or those control practices and the potential for variability in their effectiveness; (5) The nature of the applicable substantive requirement(s) for which Periodic Monitoring is needed; (6) The nature of the compliance procedures that specifically accompany the applicable requirements; (7) The type of data that would already be available for the unit; (8) The effort needed to comply with the applicable requirements and the

expected margin of compliance; (9) The likelihood of a violation of applicable requirements; (10) The nature of the Periodic Monitoring that may be readily implemented for the emission unit; (11) The extent to which such Periodic Monitoring would directly address the applicable requirements; (12) The nature of Periodic Monitoring commonly required for similar emission units at other facilities and in similar circumstances; (13) The interaction or relationship between the different measures in the Periodic Monitoring for an emission unit; and (14) The feasibility and reasonableness of requiring additional measures in the Periodic Monitoring for an emission unit in light of other relevant considerations.[17]

CHAPTER IV – CHANGES FROM PREVIOUSLY ISSUED CAAPP PERMITS

4.1 Major Changes Summary

This renewal CAAPP draft is presented in a new format. The new format is the result of recommendations by the USEPA, comments made by sources, and interactions with the public.

	Previous CAAPP Permit Layout	*New CAAPP Permit Layout*
Section 1	Source Identification	Source Information
Section 2	List Of Abbreviations/Acronyms	General Permit Requirements
Section 3	Insignificant Activities	Source Requirements
Section 4	Significant Emission Units	Emission Unit Requirements
Section 5	Overall Source Conditions	Title I Requirements
Section 6	Emission Control Programs	Insignificant Activities
Section 7	Unit Specific Conditions	Other Requirements
Section 8	General Permit Conditions	State Only Requirements
Section 9	Standard Permit Conditions	---
Section 10	Attachments	Attachments

4.2 Specific Permit Condition Changes

An emission limits has been revised for the lithographic flexographic printing operations. This resulted in [T1R] conditions.

The NOx limits for the boilers in Section 4.5 of the permit were removed because they had no valid origin and authority. The original construction permits could not be located.

Also this permit incorporates all “newly” constructed units that have been added at the facility since the last issued CAAPP.

Endnotes

[1] The federal PSD program, 40 CFR 52.21, applies in Illinois. The Illinois EPA administers PSD permitting for major projects in Illinois pursuant to a delegation agreement with USEPA.

[2] Illinois has a state nonattainment NSR program, pursuant to state rules, Major Stationary Sources Construction and Modification ("MSSCM"), 35 IAC Part 203, which have been approved by USEPA as part of the State Implementation Plan for Illinois.

[3] In Petition Response V-2009-03, USEPA considered whether conditions from certain construction permits issued to a source constitute applicable requirements even though the construction or modification has not yet begun, been completed and/or the project was not yet operational. USEPA found that those construction permits for "pending projects," like construction permits for projects that are complete and operational, also establish applicable requirements for this facility. Accordingly the Title I conditions from those construction permits have been carried over into the draft CAAPP permit for this facility.

[4] Among other things, USEPA observed that the stream-lining benefits can consist of "reduced cost and administrative complexity, and continued compliance flexibility…". *White Paper 2,* page 41.

[5] See, In the Matter of Tesoro Refining and Marketing, Petition No. IX-2004-6, Order Denying in Part and Granting in Part Petition for Objection to Permit, at page 8 (March 15, 2005); see also, White Paper 2 at page 39 ("reference must be detailed enough that the manner in which any referenced materials applies to a facility is clear and is not reasonably subject to misinterpretation").

[6] The Order provides that permit authorities must ensure the following: "(1) referenced documents be specifically identified; (2) descriptive information such as the title or number of the document and the date of the document be included so that there is no ambiguity as to which version of the document is being referenced; and (3) citations, cross references, and incorporations by reference are detailed enough that the manner in which any referenced material applies to a facility is clear and is not reasonably subject to misinterpretation." See, Petition Response at page 43, citing White Paper 2 at page 37.

[7] See, White Paper 2 at page 39.

[8] Nothing in USEPA guidance, including the White Paper 2 or previous orders responding to public petitions, supports the notion that permit authorities incorporating a document by reference must also restate contents of a given plan in the body of the Title V permit. Such an interpretation contradicts USEPA recognition that permit authorities need not restate or recite an incorporated document so long as the document is sufficiently described. White Paper 2 at page 39; see also, In the matter of Consolidated Edison Co. of New York, Inc., 74th St. Station, Petition No. II-2001-02, Order Granting in Part and Denying in Part Petition for Objection to Permit at page 16 (February 19, 2003).

[9] This approach is consistent with USEPA guidance, which has previously embraced a similar approach to certain SSM plans. *See,* Letter and Enclosures, dated May 20, 1999, from John Seitz, Director of Office of Air Quality Planning and Standards, to Robert Hodanbosi and Charles Lagges, STAPPA/ALAPCO, pages 9-10 of Enclosure B.

[10] The provisions of the Act for Periodic Monitoring in CAAPP permits reflect parallel requirements in the federal guidelines for State Operating Permit Programs, 40 CFR 70.6(a)(3)(i)(A), (a)(3)(i)(B), and (c)(1).

[11] Section 39.5(7)(p)(i) of the Act also provides that a CAAPP permit shall contain "Compliance certification, testing, monitoring, reporting and record keeping

requirements sufficient to assure compliance with the terms and conditions of the permit."

[12] The classic example of regulatory standards for which Periodic Monitoring requirements must be established in a CAAPP permit are state emission standards that pre-date the 1990 Clean Air Act Amendments that were adopted without any associated compliance procedures. Periodic Monitoring must also be established in a CAAPP permit when standards and limits are accompanied by compliance procedures but those procedures are determined to be inadequate to assure compliance with the applicable standards or limits.

[13] Another example of emission standards for which requirements must be established as part of Periodic Monitoring is certain NSPS standards that require initial performance testing but do not require periodic testing or other measures to address compliance with the applicable limits on a continuing basis.

[14] The need to establish Monitoring requirements as part of Periodic Monitoring when existing compliance procedures are determined to be inadequate, as well as when they are absent, was confirmed by the federal appeals court in Sierra Club v. Environmental Protection Agency, 536 f. 3d 673, 383 U.S. App. D.C. 109.

[15] The need to establish Monitoring requirements as part of Periodic Monitoring is also confirmed in USEPA's Petition Response. USEPA explains that "…if there is periodic monitoring in the applicable requirements, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance." Petition Response, page 6.

[16] The test for the adequacy of "Periodic Monitoring" is a context-specific determination, particularly whether the provisions in a Title V permit reasonably address compliance with relevant substantive permit conditions. 40 CFR 70.6(c)(1); *see also* 40 CFR 70.6(a)(3)(i)(B); *see also, In the Matter of CITGO Refinery and Chemicals Company L.P.,* Petition VI-2007-01 (May 28, 2009); *see also, In the Matter of Waste Management of LA. L.L.C. Woodside Sanitary Landfill & Recycling Center, Walker, Livingston Parish, Louisiana,* Petition VI-2009-01 (May 27, 2010); *see also, In the Matter of Wisconsin Public Service Corporation's JP Pulliam Power Plant,* Petition V-2009-01 (June 28, 2010).

[17] A number of these factors are specifically listed by USEPA in its Petition Response. USEPA also observes that the specific factors that it identifies in its Petition Response with respect to Periodic Monitoring provide "…the permitting authority with a starting point for its analysis of the adequacy of the monitoring; the permitting authority also may consider other site-specific factors." Petition Response, page 7.